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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,777	04/24/2001	Luosheng Peng	10480-013-999	6882

7590   07/17/2003

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EXAMINER
TO, BAOQUOC N

ART UNIT	PAPER NUMBER
2172	8

DATE MAILED: 07/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/841,777	PENG, LUOSHENG
	Examiner	Art Unit
	Baoquoc N To	2172

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **3** MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-36* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-36* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2* .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

U.S. Patent and Trademark Office
PTO-326 (Rev. 04-01)   Office Action Summary   Part of Paper No. 8
Copied from 09836972 on 12/01/2004

DETAILED ACTION

1.   Claims 1-36 are presented for examination.

Information Disclosure Statement

2.   The information disclosure statement (IDS) submitted on 06/26/01. The

submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the

information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Greenwood et al. (US. Patent No. 5,568,181) in view of Baber et al. (US. Patent No.

6,279,041).

Regarding on claims 1and 19, Greenwood teaches a method for intelligently

caching applications and data on a gateway, comprising the step of:

Determining (determine) whether to cache said set of files on a local system

based on said cache benefit index (col. 5, lines 52-55);

Caching said set of files on said local file system (once the video files in the local

system) (col. 5, lines 57-59); and

Updating (updating) a set of tables in a gateway database based on said caching (col. 40-42).

Greenwood teaches the calculating of length of the file (col. 4, lines 33-35). However, Greenwood does not teach calculating a cache benefit index for a set of files, said cache benefit index indicating a total benefit for caching said set of files. On the other hand, Baber teaches, "an identifier is calculated for each of the file segments associated with the current version and the calculated identifiers are place in a segmenting index. The calculated identifiers are compared to a reference identifier based on one of the associated file segments of the previous version and comparison operations continue until either a match is located or all the associated files segments have been test" (col. 4, lines 63-67 and col. 4, lines 1-3). This teaches the calculation of indexes or identifiers. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the calculation of indexes or identifiers for each of the file segments of Baber into Greenwood because calculating the identifiers (indexes) of a current files and the previous files in order to provide the space for caching the files to increase the storing speed of a system.

Regarding on claims 2 and 20, Greenwood teaches determining includes the steps of:

Checking available free space in said local system (col. 5, lines 35-40); and

Allowing caching of said set of files into said local file system if said local file system has enough available free space for storing said set of files (col. 5, lines 40-45).

Regarding on claims 3 and 21, Greenwood teaches determining includes the step of:

Comparing said cache benefit index to a previously calculated cache benefit index for said set of files (col. 5, lines 35-40); and

Allowing caching of said set of files if said cache benefit index is higher than said previously calculated cache benefit index (5, lines 40-45).

Regarding on claims 4 and 22, Greenwood teaches determining includes the steps of:

Comparing said cache benefit index to other cache benefit indices of fillies already cached on said local file system (col. 5, lines 35-40); and

Allowing caching of said set of files if said cache benefit index is higher than said other cache benefit indices (col. 5, lines 40-45).

Regarding on claims 5 and 23, Greenwood teaches recalculating (calculating) a new cache benefit index for said set of files upon receiving a request to download or update said set of files (col. 4, lines 33-35); and

Updating said set of tables in said gateway database on said new cache benefit index (col. 5, lines 40-43).

Regarding on claims 6 and 24, Greenwood teaches receiving a download request for said set of files (request) (col. 7, lines 4-5);

Accessing said set of files in said local file system if said set of files is cached and up-to-date (col. 5, lines 40-43);

Creating a download response to said download request, said download response including said set of files (col. 7, lines 16-20); and

Sending said download response (request) (col. 5, lines 18-23).

Regarding on claims 7 and 25, Greenwood teaches downloading said set of files from a server if it is not cached (col. 7, lines 15-20).

Regarding on claims 8 and 26, Greenwood teaches downloading includes steps of:

Sending a request to said server (request) (col. 5, lines 18-24);

Receiving a response from said server, said response including said set of files (video files) (col. 5, lines 18-23);

Parsing said response for a broadcast message (request) (col. 5, lines 18-23);

Accessing and updating said gateway database if said response includes said broadcast message (col. 5, lines 40-43); and

Sending a broadcast response to said server (col. 5 lines 18-23).

Regarding on claims 9 and 27, Greenwood teaches updating said of files from a server if it is not-to-date (updating) (col. 5, lines 40-43).

Regarding on claims 10 and 28, Greenwood teaches receiving an update request for said set of files (col. 5, lines 40-43);

Accessing said local file system to obtain at least one difference file and a broadcast message if said set of files is cached and up-to-date (col. 5, lines 40-43).

Creating an update response to said update request, said update response including said at least one difference file and said broadcast message (col. 5, lines 40-43); and

Sending said update response (col. 5, lines 40-43).

Regarding on claims 11 and 29, Greenwood teaches receiving an update request for said set of files (col. 5, lines 40-43);

Downloading said set of files from a server if said set of files is not cached (col. 5, lines 29-34);

Creating an update (updating) response to said update request, said update response including said download set of files (col. 5, lines 40-43); and

Sending said update response (col. 5, lines 40-43).

Regarding on claims 12 and 30, Greenwood teaches receiving an update request for said set of files (col. 4, lines 40-43);

Receiving at least one difference file from a server if said set of files is cached but is not up-to-date (col. 4, lines 40-43);

Creating an update response to said update request, said update response including said at least one different file (col. 5, lines 40-43); and

Sending said update response (col. 5, lines 40-43).

Regarding on claims 13 and 31, Greenwood teaches receiving an update request (request) for said set of files (col. 5, lines 18-23);

Downloading a current version of said set of files from a server if said set of files is cached but is not up-to-date (transmitting files) (col. 5, lines 18-24);

Generating at least one difference file based on said current version (col. 5, lines 40-43);

Creating an update response to said update request, said update response including said at least one difference table (col. 5, lines 40-43); and

Sending said update response (col. 5, lines 40-43).

Regarding on claims 14 and 42, Greenwood teaches receiving a status check request (determine) for said set of files (col. 5, lines 18-24);

Accessing said local file system to load any broadcast information if said set of files is up-to-date (col. 5, lines 42-45).

Creating a status check response, said status check response including said broadcast information and a status of said set of files (col. 5, lines 30-35); and

Sending said status check response (col. 5, lines 40-43).

Regarding on claims 15 and 43, Greenwood teaches receiving a status check request for said set of files (col. 5, lines 18-24);

Sending a request to a server if said set of files is cached and is not up-to-date;

Receiving a server response from said server, said server response including a current version and status of said ser of files (col. 5, lines 29-34);

Updating said gateway database on said current version and status (col. 5, lines 40-43);

Creating a status check response, said status check response including said status of said set of files (col. 5, lines 30-35); and

Sending said status check response (col. 5, lines 40-43).

Regarding on claims 16 and 34, Greenwood teaches generating at least one difference file based on said current version (col. 5, lines ;

Updating said set of files based on said difference file (col. 5, lines 40-43); and

Sending said difference file is said status check response (col. 5, lines 29-34).

Regarding on claims 17 and 35, Greenwood teaches parsing said server response for any broadcast message (request) (col. 5, lines 18-23);

Accessing and updating (updating) said gateway database if said server response includes a broadcast message (col. 5, lines 40-43); and

Sending a broadcast response to said server (col. 5, lines 40-43).

Regarding on claims 18 and 36, Greenwood teaches receiving a status check request for said set of files (determine) (col. 5, lines 29-34);

Downloading a current version of said set of files from a server (col. 5, lines 29-34);

Comparing said current version of said set of files to said set of files (local files and library files) (col. 5, lines 29-34);

Generating said status on said comparing (col. 5, lines 30-35);

Creating a status check response (determine whether or not), said status check response including said status of said set of files (col. 5, lines 29-34); and

Sending said status check response (col. 5, lines 40-43).

Conclusion

4.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Yost   (US. Patent No. 5,790,828)   Date: 08/04/2001

Vinson et al. (US. Patent No. 6,453,334)   Date: 09/17/2002

Contact Information

5.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached at (703) 305-4393.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:
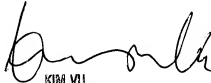Commissioner of Patents and Trademarks
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

- (703) 746-7238   [After Final Communication}]
- (703) 746-7239   [Official Communication]
- (703) 746-7240   [Non-Official Communication]

Hand-delivered responses should be brought to:
Crystal Park II
2121 Crystal Drive
Arlington, VA 22202
Fourth Floor (Receptionist).

Baoquoc N. To
July 11, 2003

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,568,181	10-1996	Greenwood et al.	725/92
	B	US-6,279,041	08-2001	Baber et al.	709/232
	C	US-6,453,334	09-2002	Vinson et al.	709/203
	D	US-5,790,828	08-1998	Jost, Larry Thomas	711/4
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office
PTO-892 (Rev. 01-2001)   **Notice of References Cited**   Part of Paper No. 8

ATTY. DOCKET NO.		APPLICATION NO.
10480-013-999		09/841,777
APPLICANT		
Luosheng Peng		
FILING DATE		GROUP
April 23, 2001		2171

LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

OIPE JUN 2 6 2001 *PATENT & TRADEMARK OFFICE*

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U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	NO

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	AA	U.S. Patent Application Serial No. 09/836,972, filed 4/16/01; "Apparatus and Methods For Managing Caches on a Mobile Device"; Inventor: Luosheng Peng.
	AB	U.S. Patent Application Serial No. 09/840,736, filed 4/23/01; "Apparatus and Method For Intelligently Caching Applications and Data on a Mobile Device"; Inventor Luosheng Peng.
	AC	U.S. Patent Application Serial No. 09/840,739, filed 4/23/01; "Apparatus and Method For Managing Caches on a Gateway"; Inventor: Luosheng Peng.

EXAMINER		DATE CONSIDERED 07-12-03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.